**Amendments to the Claims**

*Please amend the claims, without prejudice, to read as follows:*

What Is Claimed Is:

1. (Currently Amended) A method for coating ultrafine particles with a polymer, comprising:

preparing a solution of a polymer in an organic solvent;

suspending a quantity of insoluble ultrafine particles in said solution to form a suspension; and

combining a supercritical fluid as an antisolvent with said suspension in a high pressure vessel to cause the polymer to precipitate from said solution and coat the surface of at least a portion of said quantity of suspended ultrafine particles to produce polymer-coated ultrafine particles;

providing a suspension delivery system and an antisolvent supply system;

wherein no vibrational force is applied to the high pressure vessel while the antisolvent and suspension are combined in the high pressure vessel;

wherein said insoluble ultrafine particles are nanoparticles or submicron particles having a particle size of about 16 nm to ~~less than~~ about 500 nm;

wherein the polymer concentration of said polymer with respect to said solvent in said solution is less than about 4.0 mg/ml so as to minimize agglomeration of said polymer-coated ultrafine particles;

wherein the insoluble ultrafine particles are substantially insoluble in the organic solvent;

wherein the polymer-coated ultrafine particles are in the form of loose agglomerates or individual particles;

wherein the thickness of the polymer coating on the surface of the polymer-coated ultrafine particles is less than about 75 nm; and

wherein the antisolvent is combined with the suspension by:

(i) supplying the antisolvent to the high pressure vessel using the antisolvent supply system; and

(ii) delivering the suspension into the antisolvent using the suspension delivery system.

2. (Previously presented) The method of claim 1, wherein said insoluble ultrafine particles comprise an active pharmaceutical compound and said supercritical fluid is carbon dioxide.

3. (Canceled)

4. (Previously presented) The method of claim 1, wherein said polymer content of said polymer-coated ultrafine particles is up to about 25 weight percent based on the total weight of the polymer-coated ultrafine particles.

5. (Original) The method of claim 1, wherein said polymer is selected from the group consisting of:

an acrylic polymer, a polylactic acid polymer, a polylactic acid-glycolic acid polymer, and combinations thereof.

6. (Previously presented) The method of claim 1, wherein said ultrafine particles include at least one drug, gene or bioactive agent, and wherein the polymer-coated ultrafine particles function to provide controlled release of said at least one drug, gene or bioactive agent.

7. (Original) The method of claim 1, further comprising:

flushing the polymer-coated ultrafine particles to remove any residual organic solvent therefrom.

8. (Original) The method of claim 7, wherein said supercritical fluid is supercritical carbon dioxide and wherein said flushing involves contacting said polymer-coated ultrafine particles with substantially pure carbon dioxide.

9. (Canceled)

10. (Previously presented) The method of claim 1 wherein the suspension delivery system includes a capillary tube or nozzle.

11. (Previously presented) The method of claim 10, wherein the suspension is delivered into the antisolvent by spraying the suspension through the capillary tube or nozzle into the high pressure vessel.

12. (Canceled)

13. (Canceled)

14. (Previously presented) The method of claim 1, wherein said method is effected at a pressure selected to minimize agglomeration of said polymer-coated ultrafine particles.

15. (Previously presented) The method of claim 14, wherein said selected pressure does not function to depress the glass transition temperature of said polymer by compressing the supercritical fluid.

16. (Previously presented) The method of claim 1, wherein said method is effected at a temperature selected to minimize agglomeration of said polymer-coated ultrafine particles.

17. (Previously presented) The method of claim 16, wherein said selected temperature is less than the glass transition temperature of the polymer.

18. (Original) The method of claim 1, wherein said antisolvent is supercritical carbon dioxide.

19. (Original) The method of claim 1, wherein said antisolvent is supercritical ammonia.

20. (Original) The method of claim 1, wherein said antisolvent is a composite supercritical fluid.

21. (Original) The method of claim 1, wherein said organic solvent is acetone.

22. (Previously presented) The method of claim 1, wherein the antisolvent is combined with said suspension by:

(i) delivering the suspension into the antisolvent until saturation of said polymer in said suspension is reached, and

(ii) delivering the suspension into the antisolvent until super-saturation of said polymer in said suspension is reached or a phase transition via nucleation and precipitation

of said polymer takes place on a surface of said ultrafine particles to form a polymer coating thereon.

23. (Original) The method of claim 1, wherein said ultrafine particles include at least one active pharmaceutical compound and at least one diluent or filler.

24. (Original) The method of claim 23, wherein said diluent or filler comprises from 1 to 50 weight percent of said ultrafine particles.

25. (Original) The method of claim 23, wherein said diluent or filler is selected from the group consisting of lactose, dextrose, cellulose and combinations thereof.

26. (Previously presented) The method of claim 1, further comprising applying a force to said solution after the insoluble ultrafine particles are suspended therein and before the suspension is delivered into the high pressure vessel so as to break up agglomerates of the insoluble ultrafine particles formed within said suspension.

27. (Original) The method of claim 26, wherein said force is applied by a sonicator or ultrasonicator.

28. (Original) The method of claim 1, wherein said polymer-coated ultrafine particles have application in at least one of the following applications: a pharmaceutical application, a food application, a chemical application, a pesticide application, a polymer application, coating application, a catalyst application, a conductive ink application and an energetic materials application.

29. (Canceled).